

PTO CLUTCH MECHANISM ASSEMBLY MANUAL

C. F. STRUCK CORPORATION
CEDARBURG, WISCONSIN 53012



C. F. STRUCK CORP.
CEDARBURG, WISCONSIN 53012

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QUANTITY	DESCRIPTION	EACH	TOTAL
TERMS: Certified check or money order with order. For COD shipments enclose 25% deposit and pay remainder to freight company on delivery. To expedite shipping, all items sent freight collect.		TOTAL	

REFERENCES: Dun & Bradstreet; Thiensville State Bank, Thiensville, Wis.; Cedarburg State Bank, Cedarburg, Wis.

MINI-DOZER PRICE LIST

MD40 Mini-Dozer (medium duty)	\$374.95
MD45 Mini-Dozer (heavy duty)	398.95
Additional Tracks — Lawn or Dozer Shoes (medium duty)	39.95
Additional Tracks — Lawn or Dozer Shoes (heavy duty)	69.95
Optional High Speed Pulley	5.95

524.95 (150)
549.95 (149)

ATTACHMENT PRICE LIST

CG-130	Guards	\$ 4.95	PP-508	Plow	\$ 59.95
RM-360	Mower	119.95	DD-100	Disk	49.95
DB-200	Blade	59.95	CC-500	Cultivator	49.95
T-34008	Trailer	69.95	KK-200	Planter	92.00
S-36H26	Spreader	49.95	SB-19	Snow Blower	139.95
R-15	Roller	44.95	SB-30	Snow Blower adapter	19.95
BH-100	Hitch	19.95	H-30D	Hitch kit	29.95

MINI-BEEP PRICE LIST

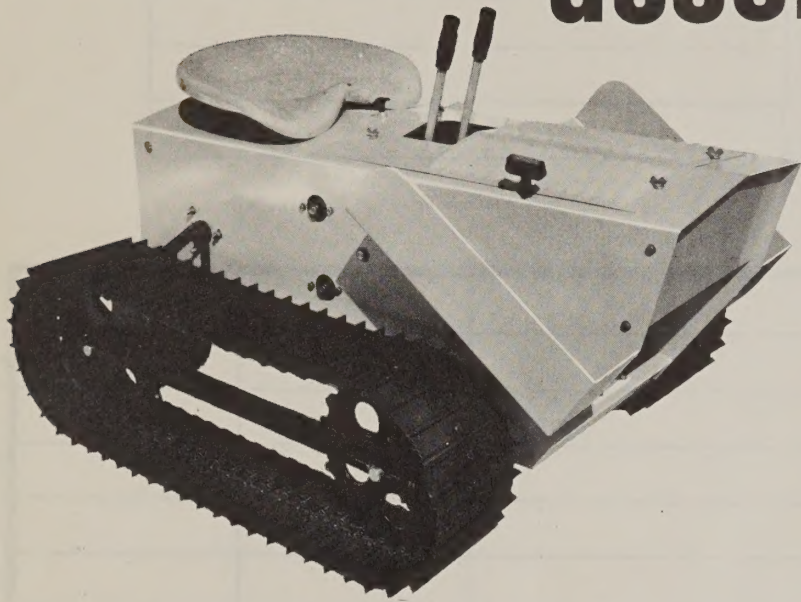
MB-710	2-Wheel drive Mini-Beep, oscillating front axle, standard manual start	\$398.95
MB-760	2-Wheel drive Mini-Beep, oscillating front axle, electric starting & lights	498.95
MB-700	4-Wheel drive Mini-Beep, (Standard Manual Start)	498.95
MB-750	4-Wheel drive Mini-Beep, (Electric Starting & Lights)	598.95

549.95 (151)
698.95 (200)
698.95 (200)
798.95 (200)

ATTACHMENT PRICE LIST

B-500	Blade	\$ 59.95	RB-100	Rear Bumper & Towing Hitch	\$ 9.95
T-34008	Trailer	69.95	FB-300	Front Bumper	4.95
A-36H26	Spreader	49.95	TC-7	Tire Chains	16.95
R-15	Roller	44.95	SB-19	Snow Blower	139.95
RM-38	Mower	124.95	SB-30	Snow Blower adapter	19.95
BT-331B	Sweeper	75.95	H-30B	Hitch Kit	29.95
BT-100	Spare Tire	24.95			

earn \$20.00 / hour assembling



MINI DOZERS / MINI-BEEPS

That's right,

make as much as \$20.00 per hour assembling Mini-Dozers and Mini-BeePs in your spare time; and do it without expensive equipment or special tools.

Our company is organized strictly for the mass-production of these machines in kit form and therefore is unable to offer an assembled unit. (This is where you can help us and at the same time make big money for yourself.)

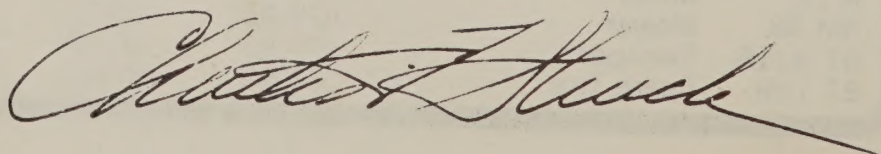
Obviously, there are many people who want a Mini-Dozer or Mini-Beep but don't feel they can properly assemble one. This your chance for big profits by simply buying the kit from us, assembling it in your spare time, and then reselling it to your own local customer.

The requirements to start your own assembly business are easy, as there are no rigid restrictions or any stock of parts you must buy. Just buy the kit at our regular, low, factory-direct prices, assemble, and resell. When assembled, the MD-40 Dozer retails for \$524.95, the MD-45 Dozer for \$549.95, the MB-700 Beep for \$698.95, the MB-750 Beep for \$798.95, the MB-710 Beep for \$549.95 and the MB-760 Beep for \$698.95. (These retail prices we ask you to maintain.)

Noting that it takes on the average about 6 hours to assemble a Dozer or Beep, you can quickly realize the tremendous profit you can make by accepting this no-risk offer. If you want more detailed information, I suggest you order our sets of Plans. (Either set separately — \$5.00, or both for \$7.50.) These Plans show in detail how each machine is constructed and how simple it is to assemble. Then, if you wish to purchase a unit, we can credit the full Plan's cost to your first purchase.

I'll be watching the mail for your answer.

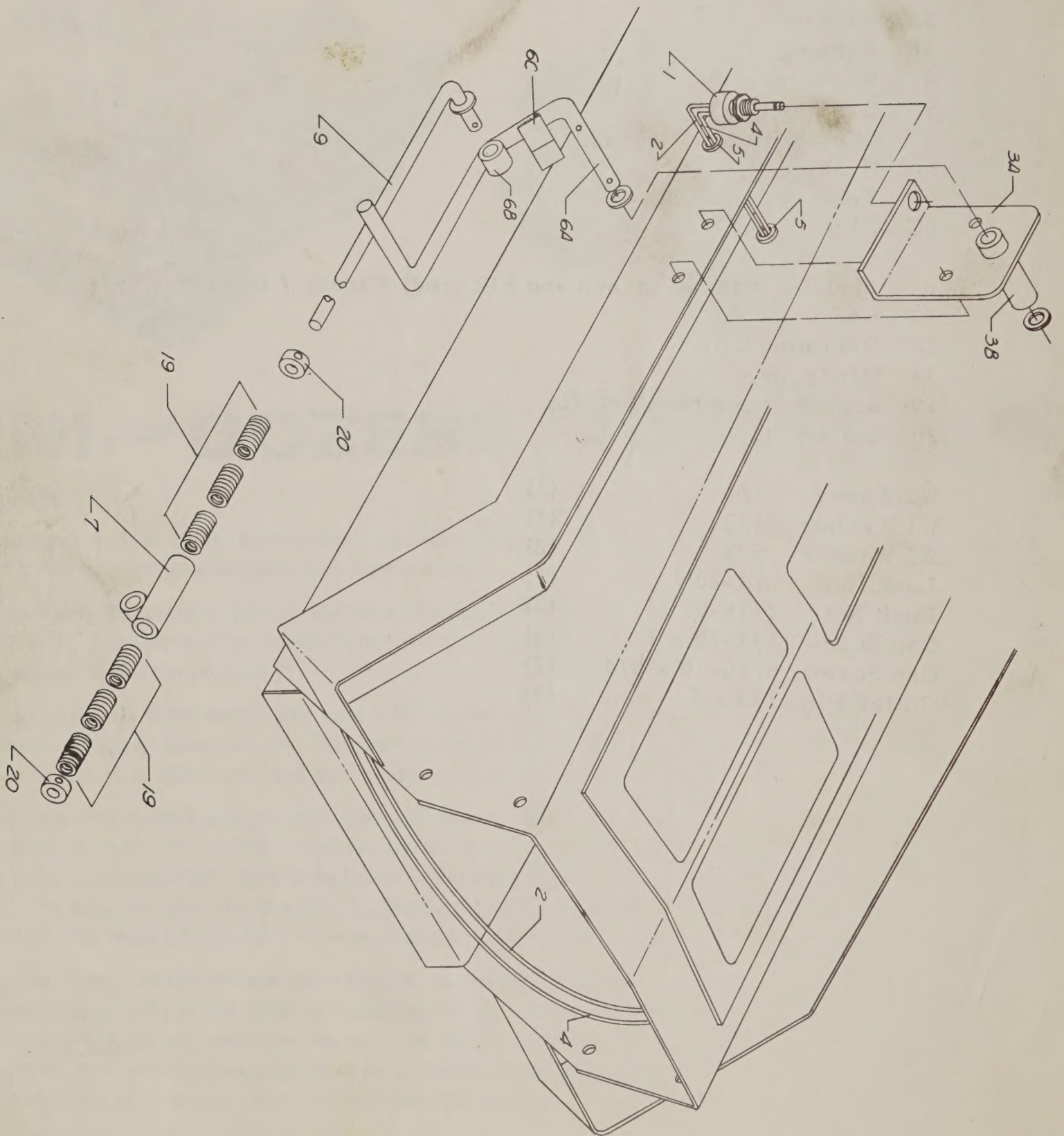
Sincerely,

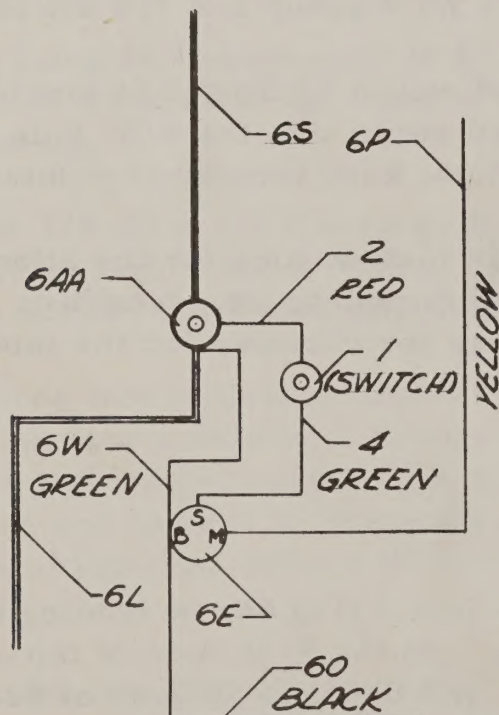
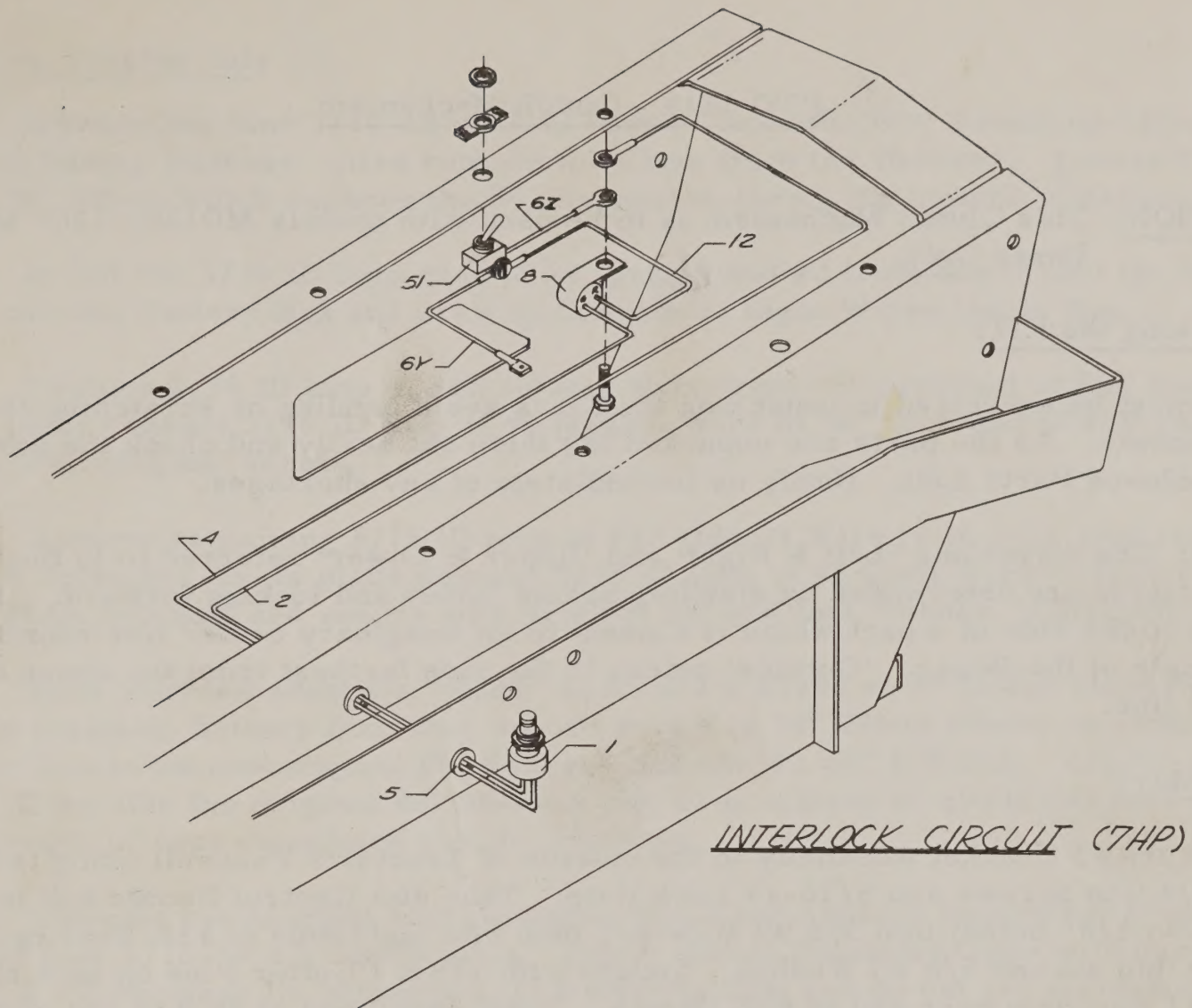


PTO 1216 - Parts List

PTO1216 1 Switch (with nuts and boot)
2 Wire (red)
3 Bracket Assembly
3A Bracket
3B Bearing
4 Wire (green)
5 Grommet (2)
6 Control Handle (clutch)
6A Handle
6B Tube
6C Clip
7 Swivel
8 Module (with #4 (green and #12 (red) Wires) 7 hp only
9 Rod
10 Retaining Clip
11 Handgrip
19 Spring (compression) (6)
20 Collar (2)

WI Washer	1/4	(1)
WI Washer	1/2	(1)
WI Washer	5/8	(2)
Lock Nut	1/4-20	(1)
Lock Nut	5/16-18	(2)
Cap Screw	1/4-20 x 1	(1)
Cap Screw	5/16-18 x 3/4	(2)
Cotter Pin	1/8 x 1	(3)





INTERLOCK CIRCUIT (12HP)

NOTE: REPLACE #6X (BLACK) WIRE WITH #1 SWITCH & #2 & 4 (GREEN) WIRES.

PTO 1216 - Clutch Mechanism

CAUTION: This Clutch Mechanism is to be used with models MD1200-1207 Mini-Dozer Only.

Unpacking the KIT:

Care must be exercised in unpacking the Kit to avoid bending or scratching the various components. As the parts are unpacked lay them out neatly and check the parts against the enclosed Parts List. Notify us immediately of any shortages.

NOTE: The directions 'Left & Right' and 'Upper & Lower' referred to in the following instructions are determined by standing behind Dozer and looking forward. 'Inside' refers to the side of a part which is closest to an imaginary center line running down the length of the Dozer. 'Outside' refers to the side farthest from the above defined center line.

Assembly:

1. Secure #3 Bracket Assembly to the outside of Tractor's Footwell using two 5/16-18 x 3/4 Cap Screws and 5/16-18 Lock Nuts. Take #6A Control Handle and insert end (with two 1/8" holes) into 5/8 WI Washer, then into right side of #3B Bearing and finally into second 5/8 WI Washer. Secure with 1/8 x 1 Cotter Pins on both sides. Slip #11 Handgrip over end of #6A Handle. Take "long" end of #5 Rod and slide on in order: #20 Collar, three #19 Springs, #7 Swivel (long tube), three #19 Springs and finally a #20 Collar. Insert remaining "washer end" of #5 Rod into outside of #6B Tube and secure on inside with 1/2 WI Washer and 1/8 x 1 Hitch Pin.

2. From below insert the threaded end of #1 Switch (a single nut should already be mounted half way down the threaded stem) into the 5/8" hole in #3A Bracket and secured above with nut provided. (Note: keep terminals pointed rearward.)

At this Point; refer to the assembly instructions for the attachment you are using with the PTO1216 Clutch Mechanism and complete its assembly. Upon completion of attachment assembly, return back to these instructions for the mounting and adjusting of the Safety Interlock Switch and Circuit.

Assembly of Interlock Circuit:

A. 7 hp Tractor only

1. Remove the left front 5/16-18 x 1 Cap Screw holding #6Z (red) Wire in a grounded position. Insert this Cap Screw into the 5/16 hole of tab on #8 Module and then into the 5/16 ID loop of #6Z (red) Wire and the 5/16 ID loop of #2 (red) Wire. Insert this Cap Screw assembly back into the underside of its 5/16-18 Weldnut and tighten.

2. Remove #6Y (red) Wire from its terminal on #51 Switch. Combine the 3/16 ID loops of both the #6Y (red) and #12 (red) Wires and using original screw remount #6Y and #12 Wire to #51 Switch.

B. 12 hp Tractor only

1. Remove the four 5/16-18 x 1 Cap Screws from the four Retaining Clips which hold #6I Wiring Harness - also remove the Clips from the Harness. Loosen the screw in the 90° Elbow which secures the #6I Harness entering the bottom of Battery Box.

2. Insert the 3/16 ID loop ends of #4 (green) and #2 (red) Wires into the 90° Elbow outside Battery Box and draw up the ends of these Wires inside Box.

3. Remove 3/16 ID loop of #6X (black) Wire from "S" terminal of #6E Switch. In its place connect 3/16 ID loop of #4 (green) Wire to "S" terminal of #6E Switch and secure with original screw.

4. Remove remaining 3/16 ID loop of #6X (black) Wire from 3/16 stud terminal of #6AA Solenoid. In its place connect 3/16 ID loop of #2 (red) Wire to 3/16 stud terminal of #6AA Solenoid and secure with original nut and lock washer. (Discard #6X Wire).

5. Give yourself adequate "slack" in #2 and 4 Wires so #7 Cover closes easily and you can maintain Battery Box; then secure screw in 90° Elbow Clamp on bottom of Battery Box to secure original #6I Harness and new #2 and 4 Wires. Lay the #2 and 4 Wires along side the original #6I Harness and wrap a layer of electrical tape smoothly along length of your completed new #6I Harness.

6. Relocate the original four Retaining Clips and replace in position securing with original four 5/16-18 x 1 Cap Screws. (Note: install Retaining Clips with care so that Wires of #6I Harness lie within loop of Retaining Clip and do not get accidentally squeezed between the tabs of the Clip and cause a possible short.)

C. Both 7 and 12 hp Tractors

1. Take remaining (plug terminal) ends of #2 and 4 Wires and follow the path of the #4Z Throttle Control Wire around the front of the Engine and to the rear under the Engine's Blower housing.

2. Remove the rear 1/4-20 x 1/2 Carriage Bolt from the #26 Bearing holding the "lower" #21 Power Shaft on right side of Body. In its place, from outside the Body, insert a 1/4-20 x 1 Cap Screw - threaded end protruding inside Body.

3. Slip #2 and 4 Wires into a plastic coated #10 Retaining Clip and mount onto protruding 1/4-20 x 1 Cap Screw (above). Secure with 1/4 WI Washer and 1/4-20 Lock Nut. (Note: before tightening, rotate Clip such that it will lead the Wires smoothly to the 1/2" hole (above and to rear of Bearing) in Body wall. You may wish to use small lengths of electrical tape and secure #2 and 4 Wires to a position of Throttle Control Wire.

4. Work #5 Grommets into the 1/2" holes provided in Right Body Wall and Footwell. From inside Body insert the "push" terminal end of #2 and 4 Wires through the above mounted #5 Grommets and attach each "push" terminal of #2 and 4 Wires to a "spade" terminal on #1 Switch.

D. Note: on all electrical connections, make sure they are tight and do not come close or touch each other - wrap any questionable connections with electrical tape. Never make your connections with the Starter (Ignition) Switch in any other position than the "off" (locked) position.

Adjustment of Interlock Circuit

A. Rotate #6A Handle rearward (until it touches Fender) and note that #6C Clip contacts "plunger" end of #1 Switch and depresses it downward. Adjust the two nuts on threaded stem of #1 Switch so that the Switch may slide up sufficiently to cause the "handgrip" of #6A Handle to rise approximately 1/4" off the Tractor's Fender.

B. Hold this Switch position by "locking" the two nuts on the Switch - make sure the two Switch terminals point rearward.

C. Slip rubber "boot" over end of plunger of #1 Switch - line up "boot" on groove of plunger and end of threaded stem.

How Interlock Circuit Functions

A. Rotating #6A Handle rearward (until Handle starts to come in contact with Tractor's Fender) will disengage the Clutch of the attachment you are operating and at the same time depresses the #1 Switch, closing it in an "on" position.

B. On the 7 hp Engine Circuit the #8 "Computer" Module interprets this "on" position Switch as a "safe" Condition and will allow the Engine to start. If the #1 Switch is not depressed (the "off" position) the #8 Module will interpret this as an "unsafe" Condition and will ground the magneto of the Engine so it will not start until you rotate the #6A Clutch Handle to the safe (attachment "off") rearward position.

C. On the 12 hp Engine Circuit the "on" position of #1 Switch will allow current to pass from the "s" terminal of the #6E Switch to the #6AA Solenoid when the starter key is turned - this will allow Engine to start. With the #1 Switch not depressed it will break the circuit and not allow current to pass to the Solenoid until you rotate the #6A Clutch Handle to the safe (attachment "off") rearward position.

At this point go completely through the instructions for this Clutch Mechanism, and check that you have correctly followed both the written instructions as well as the Drawings for your particular Engine HP. In addition verify your wiring with the Skematic of your proper Interlock Circuit.

Note: If in any case the Engine is able to be started with #6 Clutch Handle in any other than the extreme rearward "declutched" position, check for incorrect wiring, defective #1 Switch or defective #8 Module. Contact Factory if you cannot correct the malfunction. For your own safety do not try to operate your Clutch Mechanism without the Interlock Circuit functioning perfectly.

